

ABSTRACT

The present embodiments provide apparatuses and methods for use in receiving radio frequency signals. In some embodiments, a method receives an input signal comprising data and jamming signals, amplifies the input signal according to a first adjustable bias level and producing a first internal signal. The first internal signal is mixed with an intermediate frequency signal to produce a second internal signal. The method detects a level of a signal that is proportional to a level of the input signal prior to baseband limiting filtering and as such is proportional to a level of the data and jamming signals. A bias control signal is generated that is dependent on the detected level of the detected signal, and the first bias level is adjusted according to the bias control signal. The bias control signal can increase as the level of the detected signal increases and can compensate for the jamming signals.